

CLAIMS

1. A cargo container comprising:

a floor;

a front wall; and

spaced side walls,

the floor, front wall and side walls cooperatively bound a cargo storage space,

the front and spaced side walls each having an exposed inside surface bounding the cargo storage space and an exposed outside surface,

the front and spaced side walls cooperatively defining a peripheral wall structure having a top and bottom,

at least part of the peripheral wall structure comprising at least one corrugated sheet having alternating ridges and grooves,

the ridges and grooves having lengths extending in a direction between the top and bottom of the peripheral wall structure,

the at least part of the peripheral wall structure comprising at least one external panel that is connected to the at least one corrugated sheet so as to define a substantial area of the exposed outside surface.

2. The cargo container according to claim 1 wherein the at least one
2 corrugated sheet extends over substantially the entire extent of at least one of the
side walls and the at least one external panel is connected to the at least one
4 corrugated sheet to define substantially the entire exposed outside surface on the
one side wall.

3. The cargo container according to claim 2 wherein the at least one
2 external panel defines a substantially continuous planar shape over substantially
the entire exposed outside surface on the one side wall.

4. The cargo container according to claim 1 wherein the at least one
2 corrugated sheet extends substantially fully between the top and bottom of the
peripheral wall structure.

5. The cargo container according to claim 1 wherein the at least one
2 external panel is connected to the at least one corrugated sheet through
mechanical fasteners.

6. The cargo container according to claim 1 wherein the at least one
2 external panel is connected to the at least one corrugated sheet through an
adhesive.

7. The cargo container according to claim 1 wherein the cargo container
2 comprises a top rail assembly at the top of the peripheral wall structure and a
bottom rail assembly at a juncture between the floor and the peripheral wall
4 structure, and the at least one corrugated sheet extends between and is
connected to each of the top rail assembly and the bottom rail assembly.

8. The cargo container according to claim 1 wherein the alternating
2 ridges and grooves comprise alternating internal ridges and grooves and
alternating external ridges and grooves, and the at least one external panel
4 bridges a plurality of external ridges and is connected to a plurality of the external
ridges.

9. The cargo container according to claim 1 further comprising at least
2 one internal panel that is connected to the at least one corrugated sheet and
directly bounds the cargo storage space.

10. The cargo container according to claim 9 wherein the at least one
2 internal panel has a continuous planar surface that directly bounds the cargo
storage space.

11. The cargo container according to claim 9 wherein the at least one
2 internal panel is corrugated with alternating ridges and grooves, the alternating
ridges and grooves on the at least one internal panel have lengths that are
4 transverse to the lengths of the ridges and grooves on the at least one corrugated
sheet.

12. The cargo container according to claim 1 wherein the at least one
2 corrugated sheet comprises first and second corrugated sheets, the first
corrugated sheet having a first edge portion with a first free edge extending
4 generally parallel to the lengths of the ridges and grooves, the second corrugated
sheet having a second edge portion with a second free edge extending generally
6 parallel to the lengths of the ridges and grooves, and the first and second free
edges are butt joined to each other.

13. The cargo container according to claim 1 wherein the at least one
2 corrugated sheet comprises first and second corrugated sheets, the first

corrugated sheet having a first edge portion with a first free edge extending
4 generally parallel to the lengths of the ridges and grooves, the second corrugated
sheet having a second edge portion with a second free edge extending generally
6 parallel to the lengths of the ridges and grooves, and the first and second edge
portions are overlapped.

14. The cargo container according to claim 1 wherein the at least one
2 external panel comprises first and second external panels, the first external panel
has a first edge portion with a first free edge extending generally parallel to the
4 lengths of the ridges and grooves, the second external panel has a second edge
portion with a second free edge extending generally parallel to the lengths of the
6 ridges and grooves, and the first and second free edges are butt joined to each
other.

15. The cargo container according to claim 14 wherein the alternating
2 ridges and grooves comprise alternating internal ridges and internal grooves and
alternating external ridges and external grooves and the butt joined first and
4 second free edges overlie an external ridge.

2 16. The cargo container according to claim 1 wherein the at least one
external panel comprises first and second external panels, the first external panel
has a first edge portion with a first free edge extending generally parallel to the
4 lengths of the ridges and grooves, the second external panel has a second edge
portion with a second free edge extending generally parallel to the lengths of the
6 ridges and grooves, and the first and second edge portions are overlapped.

2 17. The cargo container according to claim 16 wherein the alternating
ridges and grooves comprise alternating internal ridges and internal grooves and
alternating external ridges and external grooves and the overlapped first and
4 second edge portions overlie an external ridge.

2 18. The cargo container according to claim 1 wherein the at least one
corrugated sheet comprises steel.

2 19. The cargo container according to claim 1 wherein the at least one
corrugated sheet has a thickness between 1/4 inch and 1-1/2 inches.

2 20. The cargo container according to claim 8 wherein at least one of the
internal ridges has an opening formed therein to mount a cargo control device.

21. The cargo container according to claim 20 wherein a reinforcing
2 element is provided on the at least one internal ridge.

22. The cargo container according to claim 8 further comprising at least
2 one adaptor that bridges and is connected to adjacent internal ridges.

23. The cargo container according to claim 22 wherein the at least one
2 adaptor comprises a flat plate.

24. The cargo container according to claim 22 wherein the at least one
2 adaptor comprises a U-shaped element with spaced legs that are attached, one
each to adjacent internal ridges.

25. The cargo container according to claim 22 wherein the at least one
2 adaptor has an opening formed therein to mount a cargo control device.

26. The cargo container according to claim 8 wherein the at least one
2 corrugated sheet comprises first and second corrugated sheets, and the first and

second corrugated sheets are connected so that a ridge on the first corrugated
4 sheet overlaps a ridge on the second corrugated sheet.

27. The cargo container according to claim 26 wherein an internal ridge
2 on the first corrugated sheet overlaps an internal ridge on the second corrugated
sheet and there is an opening through the overlapped internal ridges to mount a
4 cargo control device.

28. The cargo container according to claim 1 in combination with a
2 powered towing component.

29. The cargo container according to claim 28 wherein the powered
2 towing component is permanently joined to the cargo container.

30. The cargo container according to claim 28 wherein the powered
2 towing component is releasably connectable to the cargo container.

31. The cargo container according to claim 1 wherein the cargo container
2 comprises a wheeled carriage beneath the floor.

2 32. The cargo container according to claim 1 wherein the cargo container comprises a roof which spans between the front wall and the spaced side walls.

2 33. The cargo container according to claim 1 wherein the alternating ridges and grooves comprise alternating internal ridges and grooves and further comprising a liner which extends into a plurality of the internal grooves.

2 34. The cargo container according to claim 33 wherein the liner comprises a panel with a plurality of ridges which project one each into an internal groove.

2 35. The cargo container according to claim 34 wherein at least one of the plurality of ridges conforms to and substantially fills one of the internal grooves.

2 36. The cargo container according to claim 34 wherein the panel has a continuous planar inside surface spanning adjacent internal ridges.

2 37. The cargo container according to claim 33 wherein the liner comprises a panel with a plurality of reinforcing ribs that extend, at least one each, into a plurality of internal grooves.